

Application Serial No. 09/576,989

Remarks

Claims 1, 3, 7-10, 29 and 65 have been amended and claims 2, 25-28, 30-40, 45-60, 71 and 76-85 have been cancelled. Claims 1, 3-24, 29, 41-44, 61-70 and 72-75 are now pending.

Election/Restriction

Applicants elect without traverse, and without disclaiming the subject matter of the non-elected claims, the claims of Group I (1, 2-17, 61-75, and 25-40 and 45-60 in part). In addition, the claim amendments above obviate the distinction between the claims of Group I and Group II. Therefore, it is respectfully requested that the Office reconsider the restriction requirement as to Groups I and II in view of the amendments, and examine the claims as now pending.

As amended, claim 1 now recites the limitation "wherein said polynucleotide further comprises an adaptive mutation." This limitation was contained in claim 2 as originally filed. Thus, claims 18-24, which depend from claim 1 and further recite the limitation "wherein the polynucleotide comprises at least one IRES selected from the group consisting of a viral IRES, a cellular IRES, and an artificial IRES", did not include that limitation and therefore allegedly constituted a separate invention. The Office appears to have based the restriction between Groups I and II on this factor.

As amended, claim 1 now recites the limitation formerly recited in claim 2, and as all of the claims pending in this application now depend ultimately from claim 1, it is clear that all of the claims are directed to the same invention. Dependant claims 3-24, 29, 41-44 and 61 all contain additional limitations that describe optional alternative embodiments of the invention of claim 1. Claims 62-70 and 72-75 relate to vectors comprising the polynucleotide of claim 1 or to host cells that comprise the polynucleotide of claim 1 or to host cells that comprise a vector that comprises the polynucleotide of claim 1. Thus, it is clear that all of the claims of the instant application are directed to the same invention, i.e., the polynucleotide of claim 1, which comprises an adaptive mutation.

In light of the foregoing amendments to the claims and remarks, applicants respectfully request that all of the claims now pending be examined on the merits.

The Office has further required an election of species with respect to the species of substitution mutations recited in claims 14, 37, 57 and 66 and the deletion mutation recited claims 17, 40, 60 and 68. Applicants respectfully traverse the requirement, as each of the species identified in those claims is not patentably distinct. In support of this traversal, applicants point to evidence contained in both the instant application and the parent application, USSN 09/034,756 (the '756 application), filed March 4, 1998 (which claims priority to Provisional Application SN 60/039,843, filed March 4, 1997).

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The '756 application discloses a full length authentic hepatitis C virus (HCV) DNA clone capable of replication. In that application, the method and materials by which the polypeptides of the instant claims were derived are disclosed (See for example at page 41 under the subheading *Adaptation of HCV for more efficient replication in cell culture or alternative hosts*. There, the concept of engineering a dominant selectable marker under the control of the HCV replication machinery is discussed. Methods of achieving such an engineered clone were known in the art at the time of filing; the significant contribution of that application being the provision of an HCV clone capable of replication. It is such methods that are utilized in the instant application in deriving the claimed polypeptides, all of which share the common characteristic of having increased ability to establish replication in cell lines. Example 1 demonstrates the application of such methods to derive the species subject to the election requirement. Applicants assert that since all of the alleged distinct species were derived using the same methods, and all possess the characteristic of increased ability to establish replication in cell lines, they are all obvious variants and are not patentably distinct.

Having traversed the election requirement, applicants provisionally make the following elections, in order that this response is considered complete.

With respect to the substitution or deletion mutations recited in claims 14, 37, 57 and 66 or claims 17, 40, 60 and 68, applicants provisionally elect the Ser (1179) to Ile substitution mutation.

In addition, the Office requires election of one of the species recited in claim 44. Applicants again traverse, on the grounds that these species are obvious variants, and as such are not patentably distinct. In order that this response is considered complete, applicants provisionally elect SEQ ID NO:6.

It is believed that this paper is fully responsive to the Office Action of September 19, 2001. If any issues remain, the Examiner is invited to contact the undersigned.

Respectfully submitted,



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